

### REMARKS

This Application has been carefully reviewed in light of the Office Action mailed on August 12, 2004 ("Office Action"). Claims 1-13 are pending in the present Application ("the '282 Application") and were rejected by the Office Action. Applicants respectfully request reconsideration and favorable action in this case.

### Information Disclosure Statement

Applicants submitted an Information Disclosure Statement, PTO Form 1449, and copies of two non-patent references on April 16, 2004. There is no indication in the Office Action that the references were considered by the Examiner. Applicants respectfully request that the Examiner consider the references and provide the appropriate indication that the cited items were considered.

### Double Patenting Rejection

The Office Action rejects claims 1, 5, 9 and 13, as well as the dependent claims, of the present Application ("the '282 Application") under the judicially created doctrine of double patenting over claims 1, 20, 23 and 26 respectively of U.S. Patent No. 6,661,908 ("the '908 Patent"), which is U.S. Application Serial No. 09/482,075 and the parent of the '282 Application. More specifically, the Office Action rejects Claims 1-13 under the rationale that they "are now amended [and] do not correspond to the claims that have been restricted in the parent application ('075), and thus 35 U.S.C. 121 does not apply" Office Action, page 2. Applicants respectfully traverse such as rejection because the '282 Application is clearly a divisional Application and, therefore, a double patenting rejection is improper under 35 U.S.C. § 121 and MPEP §804.01.<sup>1</sup>

During prosecution of the '908 Patent, the parent of the '282 Application, a requirement for restriction was made between three groups: I) Claims 25-27; II) Claims 1-6, 8-11, 14-24, and 29-34; and III) Claim 28. *See* First Office Action for Application No. 09/482,075 mailed January

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<sup>1</sup> The MPEP mandates that the "third sentence of 35 U.S.C. § 121 prohibits the use of a patent issuing on an application with respect to which a requirement for restriction has been made, or on an application filed as a result of such a requirement, as a reference against any divisional application, if the divisional application is filed before the issuance of the patent." MPEP §804.01.

21, 2003. After an interview with the Examiner on March 14, 2003, Applicants elected Group II for prosecution on the merits. Applicants filed the '282 Application on September 8, 2003 and was assigned U.S. Serial No. 10/657,282.<sup>2</sup> The '282 Application included: 1) a transmittal form indicating the division status and citing the details of the '908 Patent as requested by MPEP §201.06; 2) a "Cross-Reference to Related Applications" paragraph citing the '908 Patent;<sup>3</sup> and 3) 13 Claims.

Applicants respectfully assert that Claims 1-13 are consonant in scope with Group I, Claims 25-27, which were restricted by the Examiner and withdrawn by Applicants during prosecution of the '908 Patent. For example, restricted Claim 25 of the '908 Patent recited:

25. A method of electronically learning a signature, comprising the steps of:

sampling a signature and obtaining raw data representative thereof;  
translating said raw data into high dimension vectors; and  
extracting, via an unsupervised neural network, high order principal components of said high dimension vectors.

and Claim 1 of the '282 Application recites:<sup>4</sup>

1. (Original) A method of electronically learning a signature, comprising the steps of:

sampling a signature and obtaining raw data representative thereof *using a recursive sampling process*;  
translating *the* raw data into high dimension vectors; and  
extracting, via an unsupervised neural network, high order principal components of *the* high dimension vectors *by cumulative ortho-normalization*.

Applicants respectfully assert that Claim 1 of the '282 Application is at least a subset of restricted claim 25 and, therefore, represent a proper division of the '908 Patent. For example, the Examiner restricted Claims 25-27 asserting that they were drawn to a method of learning –

<sup>2</sup> The Office Action further states that "there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent." Office Action, p. 3. Applicants traverse such an assertion – claims corresponding to those in the instant application were presented during prosecution of the '908 Patent and were restricted by the Examiner.

<sup>3</sup> See the '282 Application, page 1. The specification recites that this "application is a divisional of U.S. Patent Application serial No. 09/482,075 filed January 13, 2000."

<sup>4</sup> For illustrative purposes only, differences between Claim 25 of the parent case and Claim 1 of the instant case have been highlighted.

rejected Claim 1 recites a “method of learning a signature.” In another example, restricted Claim 25 recited “sampling a signature and obtaining raw data representative thereof” and rejected Claim 1 recites “sampling a signature and obtaining raw data representative thereof using a recursive sampling process.” In another words, Applicants respectfully assert that rejected Claim 1 was not changed in a material respect from restricted Claim 25 and is a proper divisional claim under 35 U.S.C. § 121 and M.P.E.P § 804.01. Independent Claims 5, 9, and 13 of the ‘282 Application are consonant in scope with restricted Claims 25-27 for analogous reasons.

Accordingly, Applicant respectfully requests that the double patenting rejection of claims 1-13 be withdrawn.

### Section 103 Rejections

The Office Action rejects claims 1, 5, 9 and 13, and claims depending therefrom, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,568,591 to Minot et al. (“*Minot*”). Applicants respectfully traverse this rejection because *Minot* fails to disclose, teach, or suggest, *inter alia*, “sampling a signature and obtaining raw data representative thereof using a recursive sampling process” as recited, in part, by Claim 1.<sup>5</sup>

First, *Minot* specifically teaches away from “sampling a signature and obtaining raw data representative thereof using a recursive sampling process” as recited, in part, by Claim 1. Indeed, the Office Action appears to agree that *Minot* fails to disclose, teach, or suggest, such a limitation by asserting that one would have to modify *Minot* with a recursive (iterative) process. *See* Office Action, p. 4. While Applicants do not concede the assertion that “recursive sampling process” as recited in Claim 1 equates with the iterative learning mechanisms casually described in *Minot*,<sup>6</sup> *Minot* specifically distinguishes itself from such prior iterative learning mechanisms. For example, *Minot* teaches – without disclaimer or qualifier – that the learning mechanism in *Minot* “does not operate iteratively and therefore can be very fast.” *Minot*, 1:63-67 (emphasis added). Put another way, *Minot* “must be considered in its entirety, i.e., as a whole, including

<sup>5</sup> Moreover, Applicants specifically traverse the Office Action’s assertion that the “use of a recursive (or iterative) sampling process is extremely well known.” Office action, p. 4.

<sup>6</sup> For example, such iterative learning mechanisms may not include or teach “translating *the* raw data into high dimension vectors” or “extracting, via an unsupervised neural network, high order principal components of *the* high dimension vectors *by cumulative ortho-normalization*” as recited, in part, in Claim 1.

portions that would lead away from the claimed invention.” *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984); *see* M.P.E.P. § 2141.02. In another example, the cited portion of *Minot* yet again teaches away by disclosing “learning of a class of signatures (those of a predetermined person and comprising, e.g., twelve specimens) typically within milliseconds, whereas the known iterative method requires considerably more time, typically hours.” *Minot*, 8:56-60. The repeated distinguishing of iterative learning mechanisms limits *Minot* to non-iterative processing and runs counter to expanding the teachings of *Minot* to include iterative learning mechanisms.

For at least these reasons, *Minot* is an improper reference and, therefore, fails to teach, suggest, or disclose, various limitations of Claim 1. For analogous reasons, Applicants respectfully assert that *Minot* fails to teach various limitations of independent Claims 5, 9, and 13. Accordingly, Applicants respectfully request reconsideration and allowance of independent Claims 1, 5, 9, and 13 and claims depending therefrom.

Applicant : Eytan Suchard et al.  
Serial No. : 10/657,282  
Filed : September 8, 2003  
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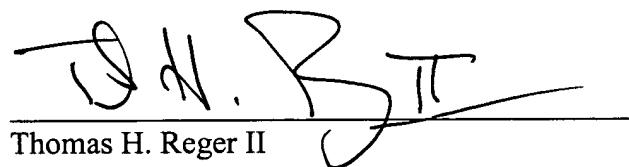
Attorney's Docket No.: 17646-086003 / 19990001-DIV

### CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all Claims. If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further request that the Examiner contact the undersigned attorney to schedule the telephone conference.

Note, Applicants filed a Revocation and New Power of Attorney on June 3, 2004, a copy of which is attached.

Respectfully submitted,

  
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Date: November 12, 2004

Enclosures: Copy of Transmittal and Revocation and New Power of Attorney (10 pages)

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